

WHAT IS CLAIMED IS:

1. A method of searching fields of a data repository using dynamic term expansion, comprising:
 - obtaining a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term;
 - identifying a set of expanded terms associated with the base search term;
 - generating a pointer to the identified set of expanded search terms; and
 - storing the query and information related to the pointer; and
 - prior to executing the query, retrieving the query and the information related to the pointer and modifying the query to contain one or more conditions based on one or more expanded search terms retrieved using the pointer.
2. The method of claim 1, further comprising modifying the identified set of expanded search terms after generating the pointer.
3. The method of claim 1, further comprising recreating the pointer based on the information related to the pointer.
4. The method of claim 1, comprising:
 - obtaining one or more parameters indicative of a state of an environment in which the query is to be executed; and
 - identifying a set of expanded terms associated with the base search term based, at least in part, on the one or more parameters.
5. A method of searching fields of a data repository using state-sensitive term expansion, comprising:

receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term;

obtaining one or more parameters indicative of a state of an environment in which the query is to be executed;

obtaining, based on the one or more parameters and the base search term, one or more expanded search terms; and

modifying the query to contain one or more conditions based on the one or more expanded search terms.

6. The method of claim 5, wherein obtaining one or more expanded search terms comprises selecting a set of expanded terms from a plurality of sets of expanded terms, each set corresponding to a different level of expansion.

7. The method of claim 6, wherein selecting a set of expanded terms from the plurality of sets of expanded terms comprises:

generating a level of expansion based on the one or more parameters; and

selecting a set of expanded search terms corresponding to the generated level of expansion.

8. The method of claim 5, wherein the one or more parameters comprise at least one parameter indicative of a date or time of day.

9. The method of claim 8, wherein the at least one parameter indicative of a date or time of day is indicative of when the query is to be executed.

10. The method of claim 5, wherein the one or more parameters comprise one or more parameters indicative of how heavily one or more system resources are loaded.

11. The method of claim 5, wherein the one or more parameters comprise one or more credentials of a user issuing the query.
12. The method of claim 11, wherein, for at least some base search terms, different sets of expanded search terms are obtained for different credentials.
13. The method of claim 11, wherein the one or more credentials comprise at least one of: an identification of the user, a group to which the user belongs, a role of the user, and a security level of the user.
14. The method of claim 13, wherein:
 - the one or more credentials comprises a role of the user; and
 - obtaining one or more expanded search terms comprises selecting a set of expanded search terms associated with the role of the user.
15. A method for providing access to data in a data repository, comprising:
 - providing a query building interface allowing a user to build and save a query for searching one or more fields in the data repository, the query containing at least one condition includes at least one base search term;
 - providing a runtime component configured to retrieve a saved query, retrieve one or more expanded terms associated with the base search term from a repository of expanded terms using pointer information associated with the saved query, and modify the query to contain one or more conditions including the one or more expanded terms; and
 - maintaining a repository containing the expanded terms by updating the repository of expanded terms based on co-occurrence of terms in the data repository.
16. The method of claim 15, wherein updating the repository of expanded terms based on co-occurrence of terms in the data repository comprises:

searching fields of the data repository for entries that contain a selected base search term;

tracking statistics indicative of the frequency with which other terms occur in the entries that contain the selected base search term; and

maintaining at least one set of expanded terms associated with the selected base search term, based on the statistics.

17. The method of claim 16, wherein maintaining at least one set of expanded terms associated with the selected base search term, based on the statistics comprises maintaining at least a first and second set of expanded terms associated with the selected base search term, wherein:

the first set of expanded terms comprises terms that occur, with at least a first frequency, in the entries that contain the selected base search term; and

the second set of expanded terms comprises terms that occur, with at least a second frequency greater than the first frequency, in the entries that contain the selected base search term.

18. A computer-readable medium containing a program for searching fields of a data repository using dynamic term expansion which, when executed, performs operations comprising:

providing a first interface allowing a user to build and save a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term;

providing a second interface allowing the user to specify a set of expanded search terms to be associated with the at least one base search term and further allowing the user to specify whether the set of expanded search terms should be dynamically linked with the query via a pointer used to identify a source of the set of expanded search terms; and

providing a runtime component configured to retrieve a saved query and modify the saved query to contain one or more conditions including a specified set of expanded search terms retrieved using the pointer.

19. The computer-readable medium of claim 18, wherein, if the user has specified the set of expanded search terms should be dynamically linked with the query, saving the query comprises saving the query with information associated with the pointer.

20. The computer-readable medium of claim 19, wherein the runtime component is further configured to recreate the pointer based on the information associated with the pointer.

21. The computer-readable medium of claim 18, wherein the operations further comprise modifying the set of expanded search terms subsequent to saving the query and prior to obtaining the set of expanded terms using the pointer.

22. The computer-readable medium of claim 21, wherein the information associated with the pointer comprises a uniform resource locator (URL).

23. A data processing system, comprising:
a collection of data;
at least one expanded term repository; and
an executable component configured to retrieve a saved query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term, and prior to executing the query, modify the query to contain one or more conditions based on one or more expanded search terms retrieved using pointer information associated with the saved query.

24. The system of claim 23, wherein the executable component is further configured to store the associated pointer information with the saved query.

25. The system of claim 23, wherein the executable component is further configured to:

obtain one or more parameters indicative of a state of an environment in which the query is to be executed; and

identify a set of expanded terms associated with the base search term based, at least in part, on the one or more parameters.